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ABSTRACT

This study examined the ability of California to meet increased demand for postsecondary education without significantly altering the basic historical assumptions and policies that have governed relations between the state and its institutions of higher learning. Results of a series of analyses that estimated projected enrollments and costs under various scenarios suggested that significant changes would be needed, and the report lists eight options to be considered: (1) eliminate certain forms of output and reduce certain services; (2) restrict access to the system; (3) increase revenue stream (tuition); (4) deliver higher education programs through other types of organizations; (5) change the governance structure; (6) change delivery systems by moving to off-campus instruction, greater use of technology, revising pedagogical approaches, and revising curriculums; (7) eliminate either the senior year in high school or the freshman year in college; and (8) change the relationship between higher education and the state government. The appendix contains information on methodology and the assumptions made to arrive at the findings. (CH)

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The California Higher Education Policy Center

Center Paper 01-93

THE PAST AS PROLOGUE:

EXAMINING THE CONSEQUENCES OF BUSINESS AS USUAL

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U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

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The Question

After many years of being able to provide almost unlimited access to a widely acclaimed educational system at minimal cost to students, California's colleges and universities have been jolted by a radically changed economic environment. Even massive increases in tuition and fees have been insufficient to overcome higher education's getting a smaller slice of a shrinking state pie. As a consequence, just balancing the budget has become the agenda for the educational leadership of the state.

The steps taken in response to these conditions—raising tuition, eliminating part-time staff, reducing course and program offerings, not giving (or getting) salary increases—have undoubtedly been extraordinarily painful for those involved. Such decisions are never easy; they are made doubly difficult because California has been so fortunate for so long. Difficult as the choices have been, however, they represent choices within the framework of "business as usual." They do not lead, except inadvertently, to notable changes in the purposes, goals, and organization of California higher education. They are the kinds of decisions that are typically made when decision makers assume (or hope) that the underlying problems are short-term in nature and will disappear if the storm can be weathered for another year or two. Such assumptions have to be expected; the alternatives lead to conclusions that can raise even more fundamental and painful questions. They also have to be confronted. Failure to address reality does not change the reality; it simply reduces the likelihood that the responses to external forces will be satisfactory and successful.

To confront the implicit assumption of "business as usual," the California Higher Education Policy Center (the Center) asked the National Center for Higher Education Management Systems (NCHEMS) to address the following question:

> "Will California be able to meet expected increased demands for postsecondary education without significantly altering the basic assumptions and policies that have historically guided the relationships between the state of California and its institutions of higher education?"

Based on the evidence presented in this brief paper, the answer to this fundamental question is clearly "NO."

The Approach

The approach used to answer this key question involved a series of three straightforward steps:

1. Future enrollments were projected through the year 2006 on the basis of expected population trends.

2. The cost of providing access to these students was calculated.

3. The ability of the state of California to pay this amount was assessed.

In each of the first two steps, simplifying assumptions were made. The most important of these assumptions are that:

- college-going rates of both high school graduates and young adults will remain constant.

- the distributions of full-time and part-time students across sectors (public community colleges, the California State University System, the University of California System, and the independent sector) will not change over the period of the analysis.

- educational costs per full-time equivalent undergraduate student (in real terms) will remain constant.

- the shares of these costs borne by the student and by the state will not change.

These are admittedly heroic assumptions, especially since one of them (the constant share of support assumption) would require weekly updating to be considered current. There is considerable evidence to indicate that they are not unreasonable, however. The reader is referred to the Appendix to this document for the evidence that supports these assumptions.

Certainly, these assumptions mask the incredible complexities present in an educational

system as large and diverse as California's. Conversely, creating a more complicated analytic model to incorporate additional variables and more accurately reflect the underlying realities would likely obscure the view of the basic issue that this study is attempting to illuminate. Recognizing this inevitable conflict, the staffs of NCHEMS and the Center agreed at the outset that the analyses should be as simple and transparent as possible and err on the side of conservatism. In short, it was decided that the model should be constructed so that it generally underestimated the future costs to the state. While there are numerous instances of such underestimation, perhaps the most significant is the exclusion of capital costs from the estimates of future financial requirements. While this approach can be viewed as unsophisticated, it is perfectly in tune with the objectives of the Center—to draw attention to educational policy issues, not to the mechanics of calculation or the technical properties of projection methodologies.

The Bottom Line

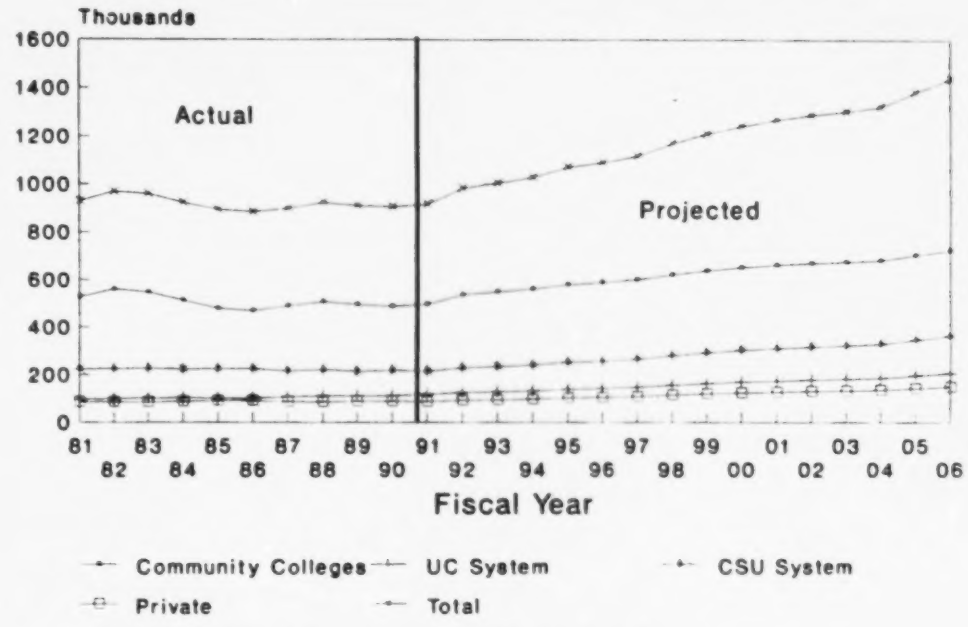
Using the approach outlined above, NCHEMS undertook a series of analyses, the details of which are contained in the Appendix to this report. The results of these analyses lead to a clear conclusion that California cannot meet the likely future demand for higher education unless it changes the basic assumptions and parameters governing the delivery and/or financing of this service. This conclusion is based on the following findings:

1. Full-time equivalent undergraduate enrollments are projected to increase by slightly more than 50%—from 915,000 to 1.4 million over the period 1991 to 2005. As seen from Figure 1, this represents a substantial increase in enrollments after a decade of relative stability. This increase will be a result of increases in both underlying populations that generate college and university enrollments, high school graduates and the younger adult population (aged 25-44) that is the predominant source of part-time enrollments. Figure 1A reinforces this point by revealing that the full-time undergraduate population is expected to increase from 675,000 to 1.12 million over the projection period, while the part-time population is projected to vary in the range of 925,000 to 990,000 during this period.

It should be noted that, because full-time enrollments are expected to increase more rapidly

Figure 1

Undergraduate FTE Enrollments



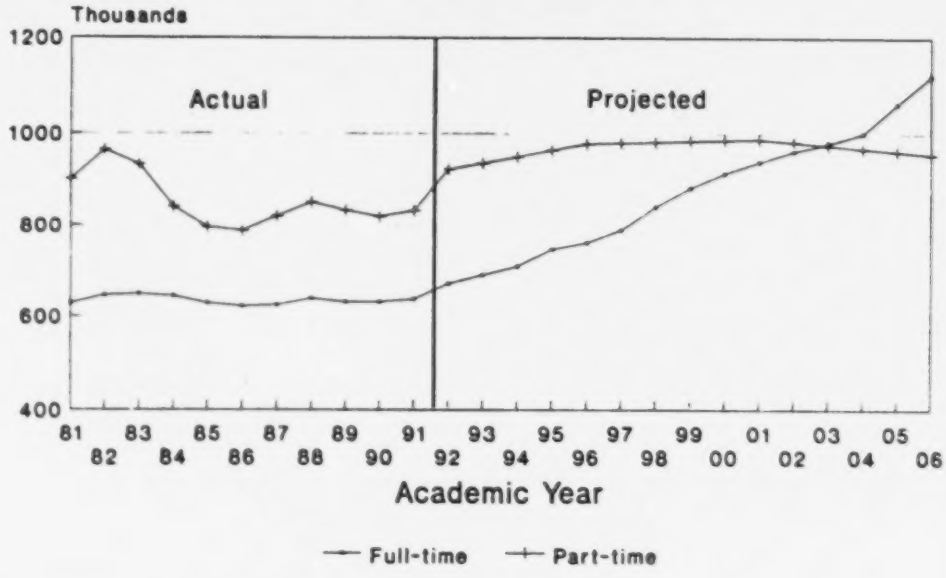
Source: Integrated Postsecondary Education Data System and NCHEMS projections from CA Dept. of Finance population data.

than part-time enrollments, the impact of this growth (assuming current guidelines) would fall relatively more heavily on the CU and CSU Systems than on the community colleges. It also should be noted that the projections are for degree-credit students only. The large numbers of students in the community colleges in programs such as English as a Second Language are excluded from these counts. As a result, the projected enrollment increase of slightly more than 500,000 reflected in this paper is less than the increases of 700-800,000 projected in other studies.

2. Given the assumptions of no changes in a) proportional distribution of students across sectors, b) educational costs per FTE undergraduate student in each of the sectors, and c) proportions of costs borne by students and the state, respectively, state support for higher education will have to increase approximately 85% in real terms (from $4.7 billion in 1993 to $8.7 billion in 2006) in order for higher education to maintain the (pre

Figure 1A

Total Undergraduate Headcount Enrollment All California Institutions



Source: IPEDS, NCHEMS projections

recession) status quo. Using 1991 as the base year, the real growth would have to be nearly 52 percent. As shown in Figure 2, this, too, represents a very significant increase after a decade of variation that ended at about the same level as it began.

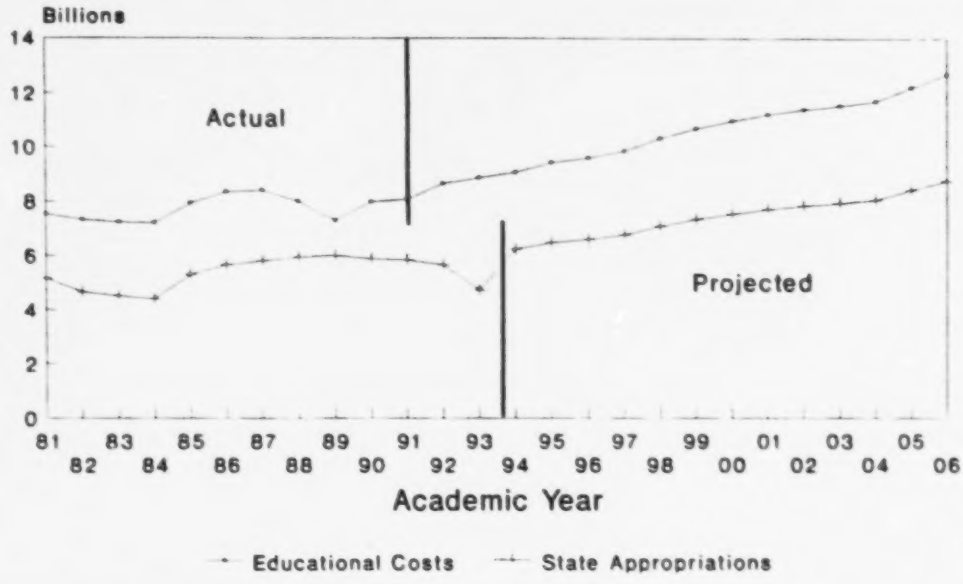
Given these estimates of future enrollments and the state funding necessary to support them, what is the likelihood that the state can provide this level of support? Answering this question is, of course, the most problematic of the analysis. Ten to fifteen-year economic forecasts of a state's economy are seldom undertaken. Most such forecasts, in fact, are confined in time horizon only to the next tax revenue and appropriations cycle. The almost unprecedented difficulties now besetting California's economy further complicate the task of credible forecasting. Still, some method is required to assess the feasibility of acquiring state resources in amounts sufficient to meet future needs.

The method chosen requires:

1. Comparing the real rate of increase in state funding required to meet projected enroll-

Figure 2

Trends in Costs and Appropriations All California Institutions



Source: IPEDS (NCHEMS projections)

ment growth with the rate of growth experienced in recent years, and/or

2. Comparing the share of state general fund expenditures necessary to meet demand from higher education with the actual share of the state general fund devoted to higher education in recent years, and

3. Making a subjective judgment concerning the likelihood that the economy will grow fast enough or that higher education's share of the state budget will increase rapidly enough to meet the fiscal requirements engendered by expanding enrollments.

The comparisons yield results that make the subjective judgments relatively easy and unambiguous.

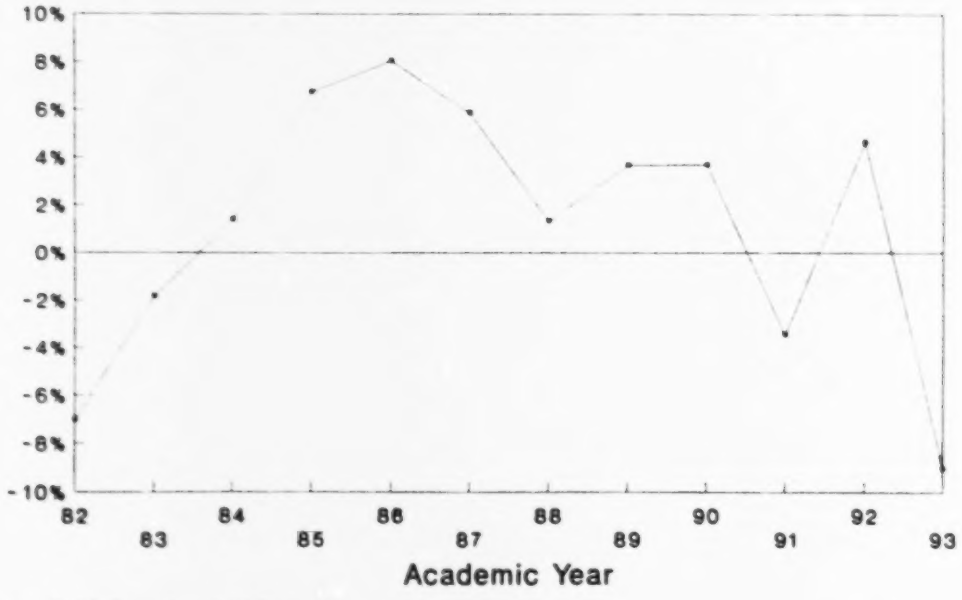
Rate of economic growth:

Calculations using the base data presented in Figure 2 reveal that the real rate of growth in state appropriations required to meet increased demand is 2.8% per year. This means that gen-

eral fund revenues must increase at the rate of 2.8% per year and higher education's share of the state budget remain constant at 1991 levels if this level of funding is to be achieved. The prospects of this occurring are not good. Figure 3 indicates the actual (real) rate of growth in California's general fund revenues over the past 12 years. This figure shows that changes have been extremely volatile over the period with the poorest performance occurring in the latter half of the period (1988-93). The average rate of growth for the entire period is 1.2% per year and the rate for the past six years is -0.1% per year. Given this history, a rate of 1.2% per year can be viewed as moderately to wildly optimistic (a judgment reinforced in conversations with staff of the Office of Finance). Even this optimistic rate of growth, however, is far below the level of 2.8% calculated as being necessary.

Figure 3

Percent Change in Total California General Fund Appropriations



Source: Calif. Department of Finance

These data are presented in real terms, that is, with the effects of inflation removed. While such an approach would be viewed by economists as the only way to legitimately perform the analyses, it is difficult to communicate the answers to lay persons who are accustomed to get-

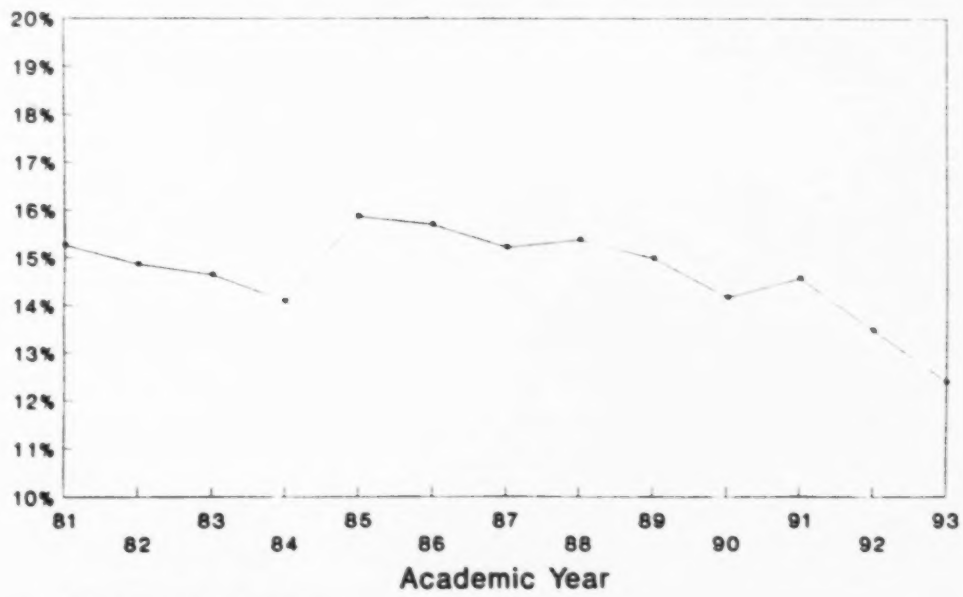
ting their economic news with inflationary factors included. In order to bridge this communication gap, the 2.8% number must be restated to a level of approximately 7.0% (2.8 plus an historical annual inflation rate of 4+%). At an annual rate of growth of 7%, in inflated terms, the California economy would double in size every ten years; in real terms, every 25 years. This is a scenario that is extraordinarily difficult to imagine.

Higher education's share:

Even if the California economy does not expand at a rate that would ensure higher education's receiving funding at status quo levels, sufficient resources could flow to the state's colleges and universities if higher education's share of the state budget were to increase. What is the probability of this occurring? On the surface, not high; the propensity of corrections and K-12 education (for example) to receive priority in the allocation of state resources makes this alternative unlikely. Still it is a possibility deserving of further examination.

Figure 4

Higher Education's Share of Total California General Fund Appropriations

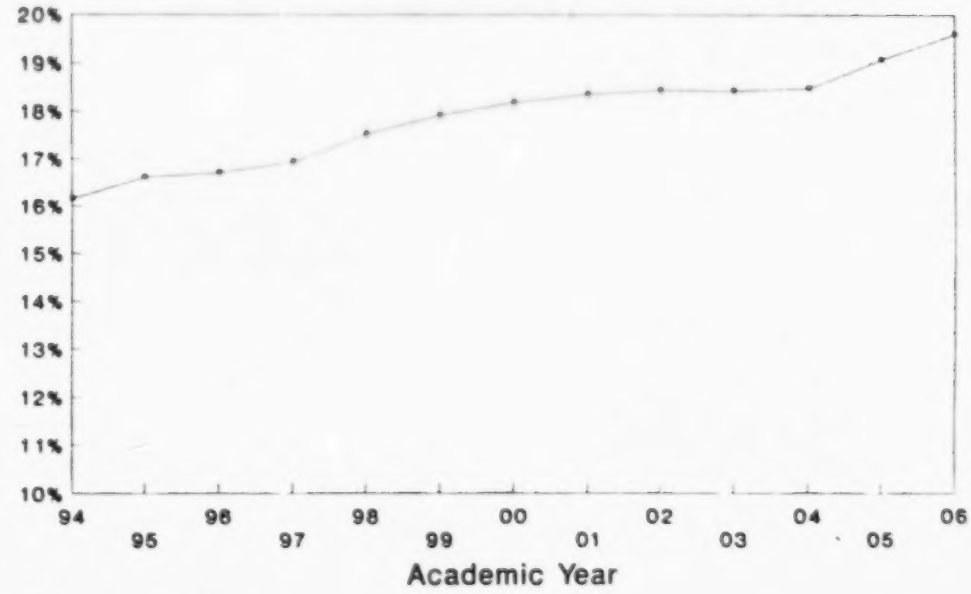


Source: Fiscal Profiles 1992 - CPEC

Figure 4 shows the share of the state's general fund appropriation received by higher education since early in the 1980s. The trend is unmistakable; after a very healthy increase in 1985 (to 15.9%), higher education's share decreased in almost every year (to a low of 12.4% reached in 1993. [It should be noted that this figure of 12.4% is a full percentage point higher than the 11.4% figure used in other reports. The specific causes of this difference remain unclear, however, it most likely stems from the use of different bases for determining the higher education portion of the state's expenditures. Total state expenditures on higher education are used in this report. This figure includes expenditures on student financial aid and other items likely excluded in the calculations that result in the 11.4% number. Regardless of the base used, the conclusion is the same—higher education is getting a substantially smaller share of the pie than it was less than a decade ago.] Figure 5 indicates the rate at which higher education's share of the state's budget would have to increase (assuming an annual general fund revenue increase of 1.2% in real terms—itself an optimistic assumption as shown earlier) in order to

Figure 5

Projected Percent of Total General Fund Appropriations Needed to Fund Higher Ed.

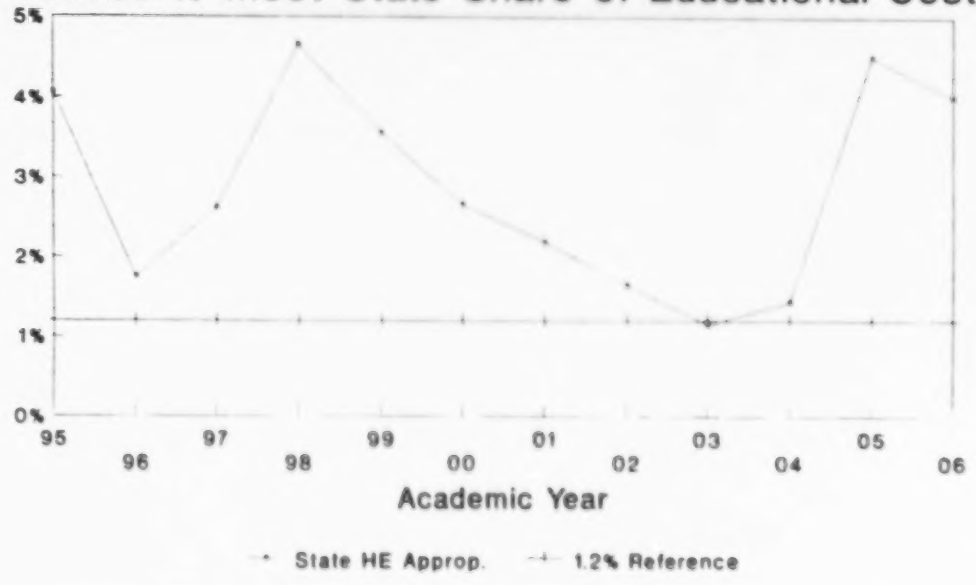


Source: NCHEMS projections

meet the projected needs of higher education. This figure indicates that higher education's share would have to be in excess of 16% in 1994 and increase to nearly 20% by the end of the period for which projections are being made. These figures do nothing but reinforce the earlier conclusion that higher education is unlikely to find the answer to its fiscal woes in an increased share of the state budget.

Figure 6

Real Percent Changes in State Higher Education Appropriations Needed to Meet State Share of Educational Costs



Source: NCHEMS projections

These data are displayed in a slightly different way in Figure 6. Here the expected year-to-year variations in the state's share of educational costs are compared with the average rate of growth in total general fund appropriations over the past 12 years (1.2% per year). It is noteworthy that the projected increase in needed fiscal support dips this low only once in the period under consideration.

To the authors, this evidence is persuasive. There is very little basis on which to pin a hope that California's system of higher education can meet increased demand without undergoing significant—perhaps even radical and wrenching—change.

The Options

If California cannot successfully meet expected increases in demand for higher education by conducting business as usual, what policy actions might allow supply and demand to be brought back into equilibrium? This question was asked of some 40 individuals invited by the Center to meet in small groups and discuss the array of options available to the state's educational and political leaders as they struggle to balance the needs of individuals and society with the ability of those individuals and that society to pay for the required educational services. The discussions in these meetings were lively, creative, and considerate of those most heavily vested in the higher education experience, students and members of the faculty. Out of those discussions came a long list of possible changes that could be made in order to serve the citizens of the state within the resources that could be made available.

These options, organized around major themes and stripped of much of the nuance and rich texture that accompanied their original presentation, are presented below:

1. Eliminate certain forms of outputs; reduce the array of services provided.

   Possibilities under this heading ran the gamut from eliminating duplicate programs, to limiting institutions (and fields) in which research would be conducted, to severely reducing the array of student services that would be made available on campus.

   The more radical suggestions called for "unbundling" higher education—recognizing that instruction and assessment/credentialing (for example) might be accomplished through an array of different organizations, not all of which would need to be colleges or universities.

2. Limit demands on the system by restricting access.

   Numerous criteria for limiting access were mentioned—among them age, ability or prior academic attainment, ability to pay, and prior cumulative demands on (services received from) the higher education system.

3. Increase the revenue stream.

   While there were numerous pleas for more state funding, the bulk of the ideas under this heading revolved around schemes for increasing the share of educational costs borne by

the student. Favored were high tuition/high aid strategies that would differentiate tuition levels on the basis of students' ability to pay.

4. "Export the problem"—involve a broader array of organizations in providing the services now offered by colleges and universities.

   At one extreme, the suggestions made involved widening the range of postsecondary education institutions that could be enlisted in serving increased demand—including independent and proprietary institutions and those in other states. The broader view led to suggestions about utilizing other types of organizations—public schools, business and industry, social service agencies, etc.—in the delivery of higher education programs.

5. Change the educational system/governance structure.

   The overarching recommendation was to reconceptualize the segments and individual institutions into a more coordinated system of higher education. This suggestion had far-reaching implications including creating more specialized organizations (for example, to conduct research, provide remedial/developmental education, or to teach lower-division courses) and changing governance structures to reflect regional needs and interests.

6. Change the delivery system.

   This category contained a larger number of specific suggestions than any other—they ranged from becoming more service-oriented (off-campus instruction, etc.), to use of technology, to year-round offerings, to complete revampings of pedagogical approaches and curriculum/content of academic programs.

   Consistent with the notion of unbundling, there were numerous proponents for moving to output-oriented (competency-based) education in order to reduce the time that some students remained in the system.

7. Increase the expectations for students coming out of high school.

   The motivation beneath this general suggestion was to create a linked system of K-

12/postsecondary education that made more efficient use of student time allowing elimination of a year of study (either the senior year of high school or the freshman year of college).

8. Change the relationships between higher education and state government.

   Eliminate rules and regulations/constraints contained in the Education Code.

These suggestions are but a start in the Center's process of identifying policy options to be explored further. This list undoubtedly can, and will, be expanded to include additional, creative options. Even when the list is completed, however, the work is not done. There will remain the task of selecting among the options those recommended for implementation.

However, there is an even greater task—to identify the desired ends that the policy options (means) seek to achieve. There was no systematic attempt in the small group meetings to generate a list of "ends" to be served by California's system of higher education. Nevertheless, a lengthy list of purposes for investing in higher education emerged from the groups discussions. However, because this was not a specific agenda item, the list is uneven and incomplete.

a. Maximize economic health of the state (provide occupational training and retraining and engage in other activities that will enhance economic development).

b. Improve elementary and secondary education (through improved teacher education and other means).

c. Improve student learning and attainment.

d. Serve the common good—develop engaged citizens.

e. Improve environmental quality.

f. Aid the integration into society of individuals from different nations and cultures.

g. Provide access to undergraduate education; maximize equity of opportunity in the process.

h. Create a strong system of educational institutions.

i. Conduct problem-centered research.

Because each of these ends must be achieved through implementation of different policy options (or combinations of options), the task of grappling with—and forging a political consensus around—the priorities assigned to these ends is a critical next step for the Center.

APPENDIX

This appendix contains information on the methodologies used and the assumptions made in arriving at the findings reported in the body of the report.

A. Estimates of Future Enrollments

For both technical and practical reasons, separate estimates of future enrollments for full-time students and for part-time students were developed. Technical reasons for making this distinction include:

- the fact that full-time students are much more likely than part-time students to be of traditional college going age. This means that the expected number of high school graduates is an appropriate base from which to calculate the estimated number of future full-time students.
- the fact that part-time students are much more likely than full-time students to be older—that is, to be "non-traditional" students. Because of this, the number of 25-44 year-olds in the state's population is the most appropriate basis on which to calculate the estimated number of future part-time students.
- the fact that full-time and part-time students distribute themselves across the current four sectors of higher education in different ways. Because the sectors have significantly different cost structures, financial calculations made in the second stage of our analyses are more valid because the distinction between full-time and part-time students is consistently incorporated into all cost/FTE calculations.

On the practical level, official state projections for both high school graduates and the 25-44 year old population for California are readily available. As a result, it is both appropriate and feasible to develop separate, projected estimates of full-time and part-time enrollments.

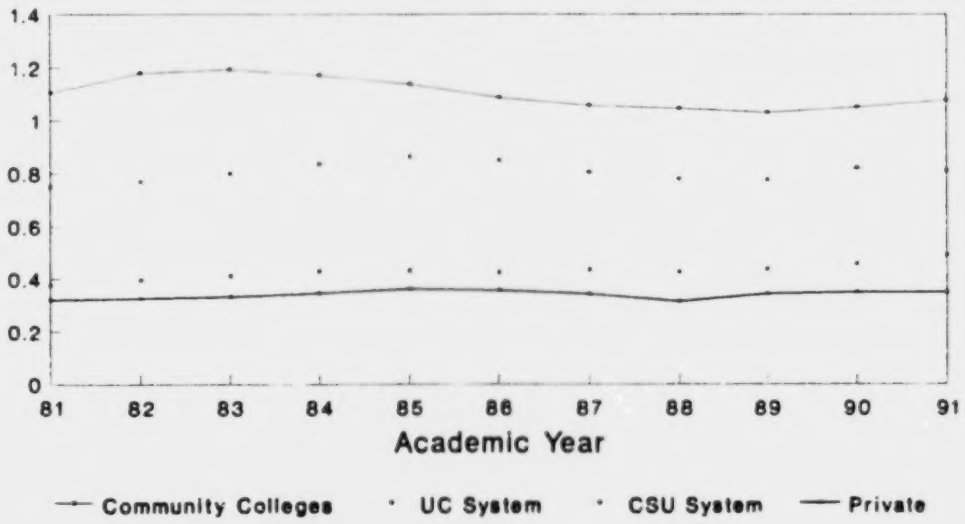
Estimates of future student demand, we made the following assumptions:

1. Full-time undergraduate enrollments can be estimated most directly as a constant percentage of projected high school graduates. Corollary assumptions are that the current

participation and persistence rates of high school graduates will remain constant (or will change so that any variations will counterbalance one another). This assumption is shown to be historically defensible by the data presented in Figure 7: the ratio of full-time undergraduate headcount students in California to high school graduates has been quite stable in recent years for all four higher education sectors. Over the past five years for which data are available (1987-91) the ratio of full-time undergraduate students to high school graduates increased from 1.055 to 1.076 for the community colleges, from .433 to .489 for the UC System, from .802 to .809 for the CSU System and from .341 to .348 for independent colleges. Because the changes are very small, and all increasing, use of the most recent year's ratio represents a sound basis for projecting future full-time enrollments.

Figure 7

Full-Time Undergraduate Headcount per High School Graduate



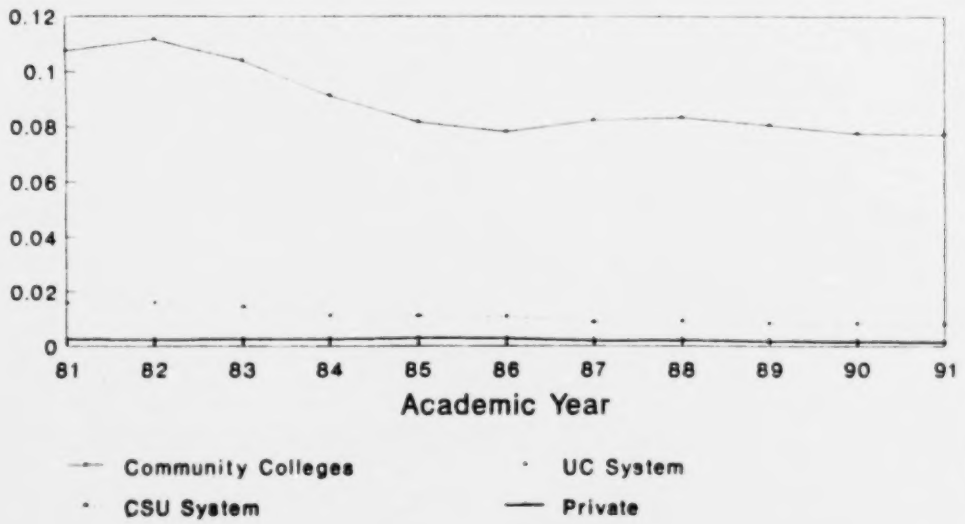
Sources: Integrated Postsecondary Education Data System (IPEDS)
Demographic Research Unit, CA State Dept. of Finance (1990)

2. Part-time undergraduate enrollments can be estimated as a constant percentage of the projected number of persons in the 25-44 year old population. Figure 8 indicates that

these ratios have also remained stable for all sectors over the past five years, after a precipitous drop for community colleges (the only sector with a major proportion of part-time enrollments) in the period 1982-85. The ratio of headcount part-time students to population aged 25-44 held constant for the past two years at .077 after hovering around .083 for several previous years. The ratio for UC has been constant at .001 for 10 years, for CSU constant at .008 for three years, and for independent colleges the value has been .002 for the past five years. By using the most recent year's ratio as the basis for our estimates, obtained results thus represent a reasonable "post Proposition 13" view of the world for community college enrollments (the segment with our largest proportion of students by far).

Figure 8

Part-time Undergraduate Headcount per 25-44 Population



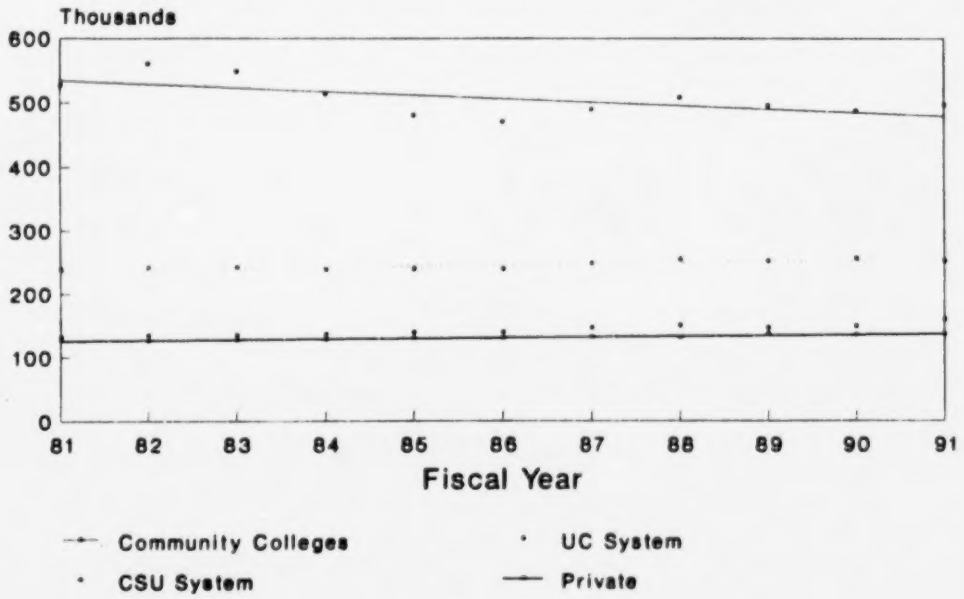
Sources: Integrated Postsecondary Education Data System (IPEDS)
Demographic Research Unit, CA Dept. of Finance (1990)

3. The share of both full-time and part-time students for each higher education sector will remain constant over the period of the estimate. Figures 7 and 8 suggest that relative

enrollment shares across sectors have been stable over the past five years. For purposes of this analysis, it is appropriate to assume that these past patterns will continue. While the relative shares of both full and part-time remained stable in the recent past, changes in other underlying factors (the more rapid growth of projected full-time as compared to part-time students) have resulted in some discernible trends in full-time equivalent (FTE undergraduate enrollments. As shown in Figure 9, the cumulative effect of these various factors has been a slight decline in FTE (degree-credit) enrollments in the community colleges (from 526,000 in 1981 to 496,000 in 1991). In the other sectors, FTE enrollments have increased—from 131,000 to 159,000 in the UC System, from 238,000 to 251,000 in the CSU System, and from 127,000 to 136,000 in private institutions. (For all subsequent calculations, FTE is defined as actual full-time students plus one-third of actual part-time enrollments).

Figure 9

Undergraduate FTE Enrollments

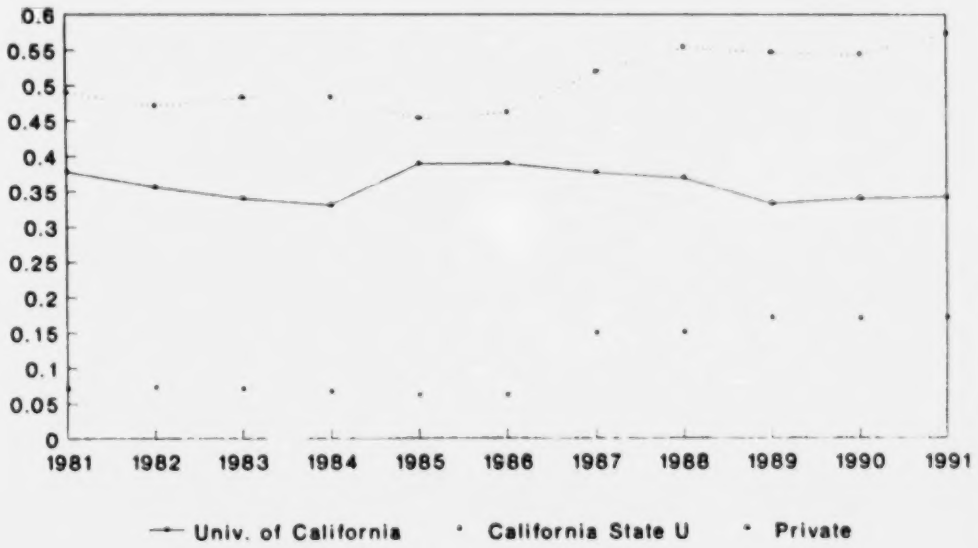


Source: Integrated Postsecondary Education Data System (IPEDS)

4. Ratios of undergraduate to graduate students will remain constant in each of the three sectors that enroll graduate students. Figure 10 indicates that these ratios have increased somewhat for the University of California and have decreased for the California State University over the past decade. However, they remained stable for the most recent years for which data are available. [Over the past three years, the ratios have varied from .332 to .341 for the UC System, from .169 to .170 for the CSU System, and from .547 to .573 for private institutions.] The stability of these ratios indicates that the number of graduate students is growing at the same rate as undergraduate students in these three sectors. This fixed relationship is assumed to carry forward into the future. As a consequence, no separate enrollment projects or cost estimates were made for the graduate component of the instructional program.

Figure 10

Ratios of FTE Graduate Students to FTE Undergraduate Students, By Segment



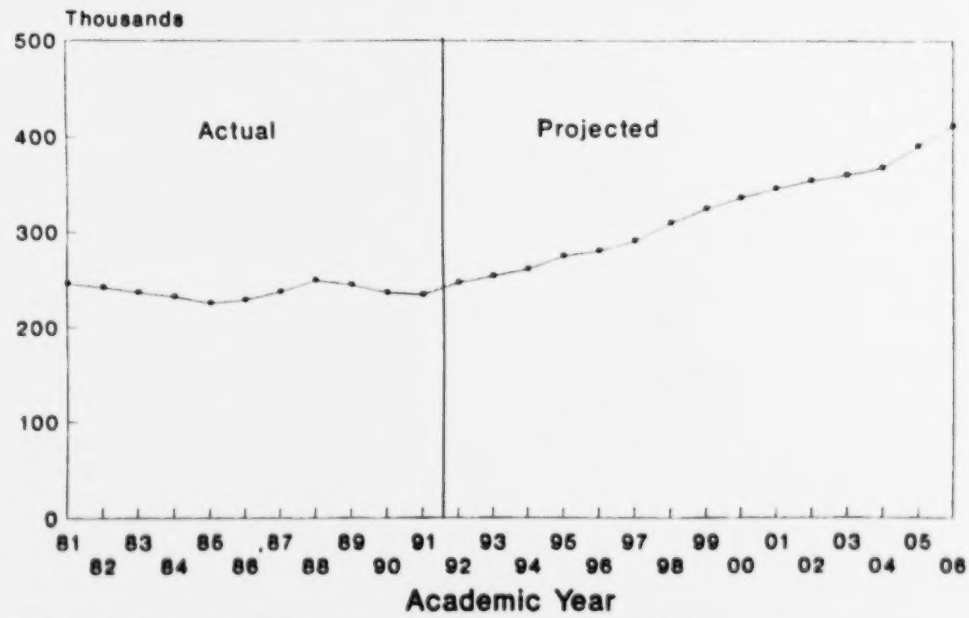
Source: Integrated Postsecondary Education Data System (IPEDS)

5. None of the above ratios will be significantly affected by expected changes in the ethnic mix of the state's population. Historically, college-going rates for different ethnic groups

in California have varied substantially, with rates for blacks and Hispanics being significantly lower than those for Caucasians. Our estimate of future growth is thus less conservative than it might be if adjustments were made for current ethnic composition and rates of participation. But because it is a likely policy objective that participation rates for all ethnic groups be roughly equivalent, we feel this assumption to be appropriate in undertaking any estimate of future demand.

Figure 11

California Public High School Graduates



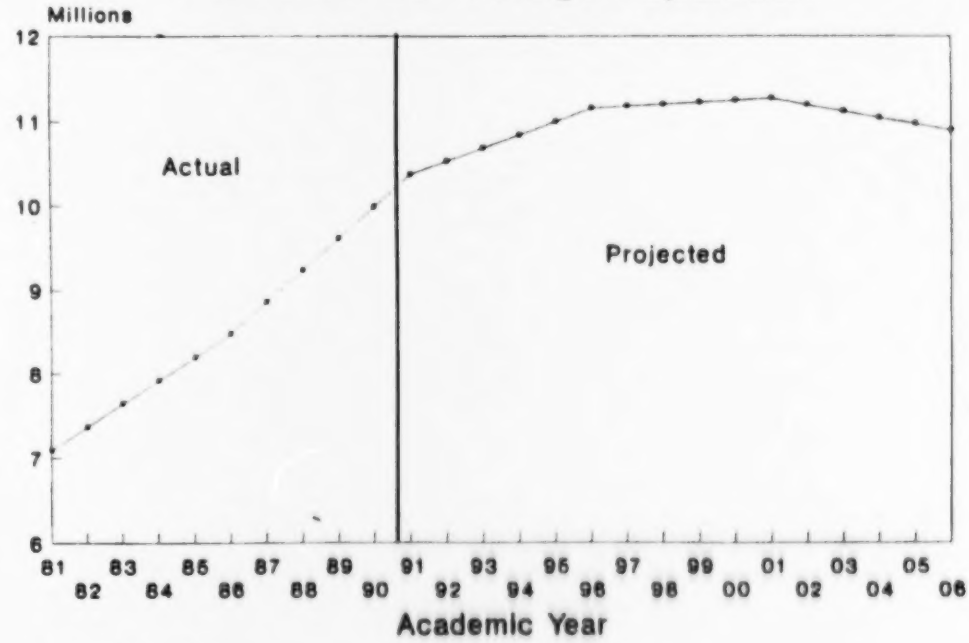
Source: Demographic Research Unit, CA Dept. of Finance (1990)

6. The ratio of degree-credit to nondegree credit demand will remain constant.

Figures 11 and 12 indicate that the underlying population factors driving our full-time and part-time estimates of future enrollment are distinct, and will behave somewhat differently over the next several years. After a decade of relative stability during the 1980's, the number of high school graduates is expected to increase by approximately 60% (from 254,000 to 411,000) between 1993 and 2006. Conversely, the 25-44 age group, after explosive growth in the 1980's is expected to grow more slowly in the early 1990's and then to experience a modest decline.

Figure 12

California 25-44 Age Population



Source: CA Dept. of Finance

These trends have important implications for our analysis. Figure 13 reveals the expected enrollment consequences of predicted changes in these base factors, coupled with the assumptions enumerated previously. Two specific implications of these probable developments are important. First, the rate of increase in undergraduate FTE students will be greater at four year colleges and universities than at the community colleges, given the assumptions employed. Second and consequently, the costs of providing access to these new students will increase disproportionately, because a higher overall share of the growth in full-time equivalent enrollment will be in four-year (and, therefore, higher cost) institutions. These economic consequences are explored more fully in the next section.

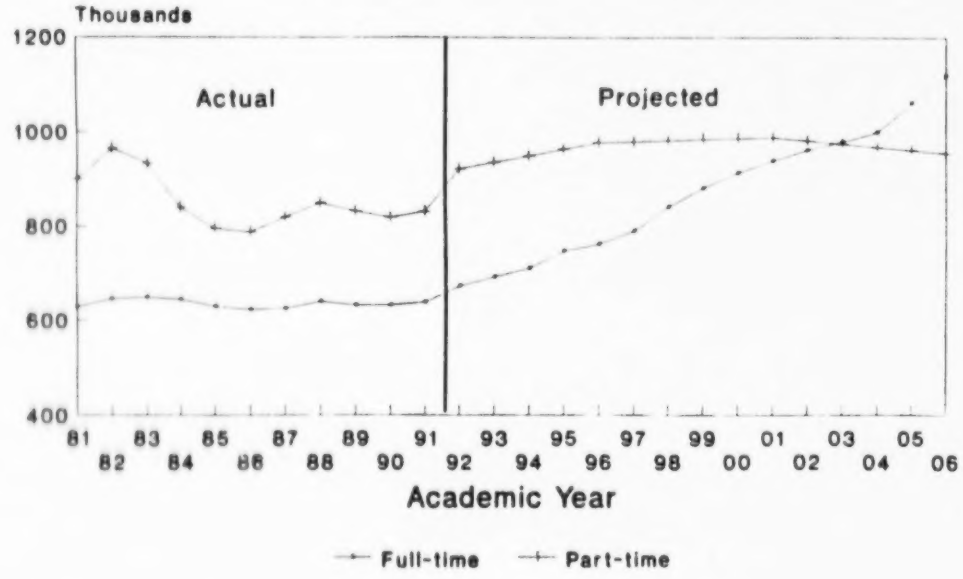
B. Estimating Costs

A number of simplifying assumptions were also made in the process of estimating the costs associated with providing access to higher education to these students. The most important are the following:

1. Direct costs of research and public service programs, along with the share of administra-

Figure 13

Total Undergraduate Headcount Enrollment All California Institutions



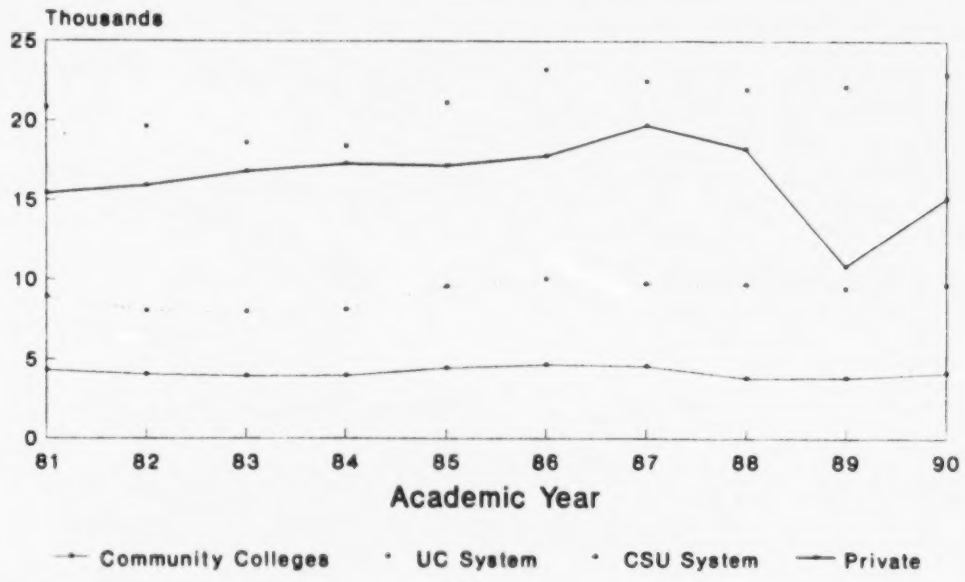
Source: IPEDS, NCHEMS projections

tive costs that can be attributed to these programs, can be excluded from the calculation of educational costs. This assumption affects primarily the cost estimates associated with students enrolled in the University of California System, making these estimates several percentage points lower than they would have been had all unrestricted expenditures of the System been treated as educational costs. This is in keeping with the objective of erring on the side of being conservative in making projections. It also removes the necessity of dealing with the complexities of projecting extramural funding as part of the analysis.

2. Projected Educational costs per FTE undergraduate student can be held constant at FY90 rates. Figure 14 reveals that, with the exception of private sector institutions, educational costs expressed in constant FY90 dollars have remained stable over the past four or five years. As a consequence, 1990 values were used in making cost projections. These values are approximately 4100 for community colleges, 22,900 for the UC System, 9600

Figure 14

Educational Costs in Constant Dollars per Undergraduate FTE Student

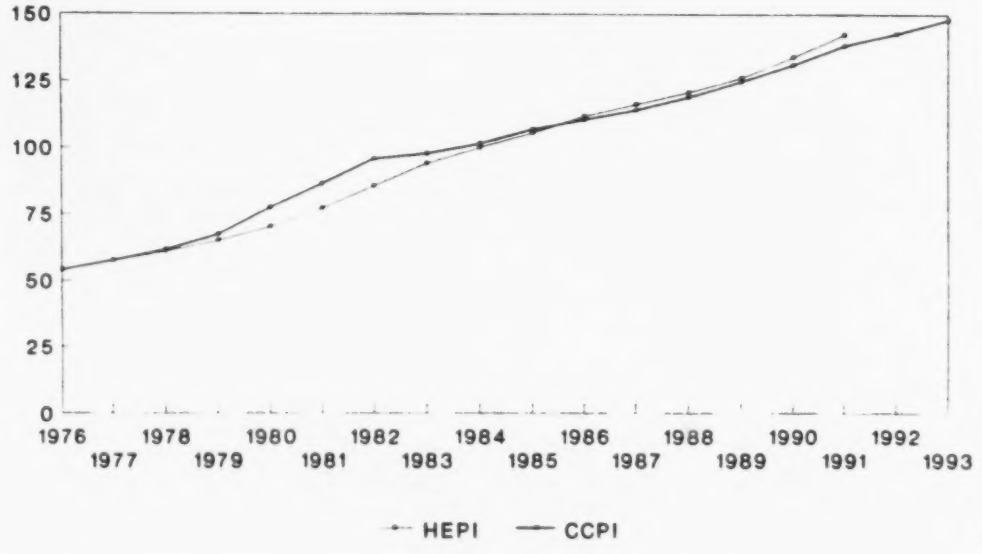


Source: IPEDS

for the CSU System, and 15,100 for the private institutions. [The reader is cautioned that these values represent an artifact of dividing total instructional costs by FTE undergraduate students. This ratio has utility given the various assumptions previously enumerated—including that regarding a constant ratio of graduate to undergraduate students. However, the numbers should not be interpreted as reflecting the true costs of educating an undergraduate student.] FY90 is used as the base year for two reasons. First, it is the last year for which comprehensive data are available (although FY91 data should be available shortly). Second, current information suggests that sharply limited levels of available resources over the past two years are having the net effect of forcing institutions to make reductions in educational expenditures on a per FTE basis. If this indeed is the case, FY90 expenditure levels reflect a "status quo" more in keeping with real needs than do current funding rates that may embody an inevitable institutional strategy of underfunding important nonpersonnel items in the near term, while protecting core salary lines.

Figure 15

Comparison of HEPI and California Consumer Price Index



Source: Fiscal Profiles 1992 - California Postsecondary Education Commission

3. Only institutionally-related operating costs are encompassed in the analysis. Student financial aid is not included, nor are the costs of auxiliary enterprises.

4. Capital costs are not included. Given the fact that as many as 460,000 additional FTE undergraduate students can be expected in the period being investigated, it is unlikely that the growth can be accommodated merely by using existing campus facilities more efficiently. This assumption is likely to contribute more than any of the others to an estimation of the expenditure levels required to meet anticipated enrollment demands.

5. Prices in the higher education sector will not increase more rapidly than those in other sectors of the California economy. Figure 15 indicates that the Higher Education Price Index (HEPI) and the California Consumer Price Index have moved in very similar ways over the past 15 years. As a consequence, projected educational costs and needed state revenues can be treated in "real" economic terms without adjustment to one or the other of these variables.

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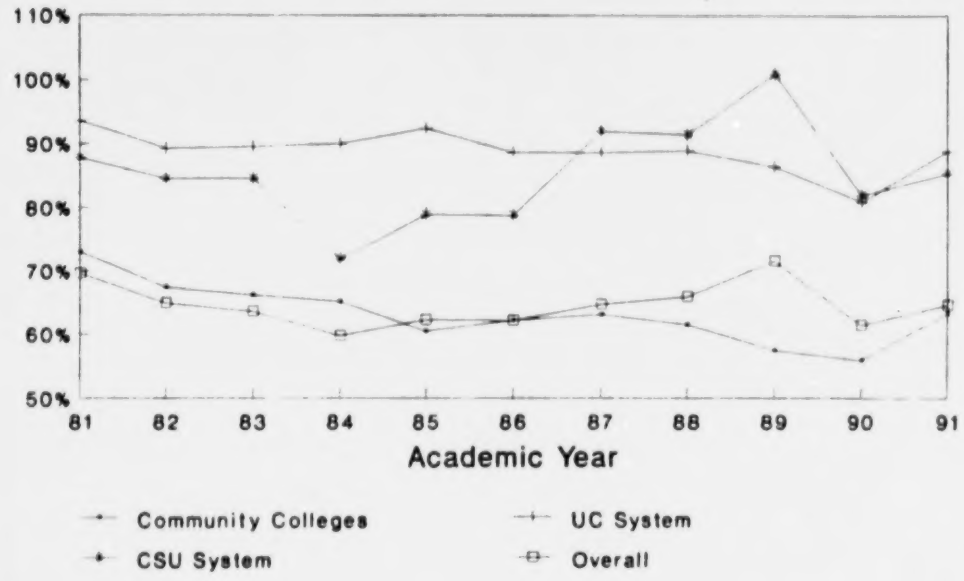
6. The state share of higher education's costs will remain constant at the FY91 level. As shown in Figure 16, the FY90 level of state support for higher education is generally representative of the levels for the prior ten years. Given the pattern of decreasing state appropriations and rapidly escalating student charges imposed over the past two years, the current state share is undoubtedly lower than the FY91 figure. Thus the values assumed for the projection represent a figure somewhere between "what was" and "what is."

Figure 16

State Shares of Educational Costs by Sector (Historical)



Source: IPEDS

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